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April 30, 1999

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APR 30 1999

**Memorandum of Ex Parte Communication**

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Ms. Magalie Salas  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S. W.  
Street Lobby – TW A235  
Washington, D.C. 20554

Dear Ms. Salas:

Re: *CC Docket No. 99-68 – Inter-Carrier Compensation for ISP-Bound Traffic  
In the Matter of 1999 Price Cap Revisions*

On Thursday, April 29, 1999, Mr. Paul Cooper and the undersigned representing SBC met with Commission staff members Mr. Craig Brown, Mr. Chuck Needy, Ms. Sharon Webber, Mr. Rich Lerner, Mr. Jay Atkinson, Mr. Joe Bender and Mr. Rodney McDonald regarding the jurisdictional treatment of Internet traffic and discussed the above-listed proceedings. The attached materials describing why Internet-related costs are properly assigned to the Interstate jurisdiction were distributed during the meeting.

We are submitting the original and one copy of this Memorandum to the Secretary in accordance with Section 1.1206 of the Commission's rules. Please stamp and return the provided copy to confirm your receipt. Please contact me at (202) 326-8889 should you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Jay Bennett".

cc (w/o attachments):

Craig Brown, Chuck Needy, Rich Lerner, Sharon Webber,  
Jay Atkinson, Rodney McDonald, Joe Bender

No. of Copies rec'd  
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041



B. Jeannie Fry  
Director-  
Federal Regulatory

SBC Communications Inc.  
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Phone 202 326-8894  
Fax 202 408-4806

January 20, 1998

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APR 30 1998

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Ken Moran, Chief  
Accounting & Audits Division  
Federal Communications Commission  
2000 L Street, NW, Room 812  
Washington, DC 20554

**Re: Jurisdictional Separations Adjustments - Internet Usage**

This is to advise you of action we are taking with regard to jurisdictional separations data for Southwestern Bell Telephone Company (SWBT), Pacific Bell, and Nevada Bell, as it relates to Internet traffic volumes and 1997 reported results.

As you know, with the phenomenal growth of Internet/Internet Service Provider (ISP) usage in recent years, the jurisdictional nature of Internet traffic has quickly become a significant issue. Initially, this usage which is originated and transported by SWBT to a CLEC appeared to be "local exchange" (like Feature Group A usage) and seven-digit dialed. Due to a lack of switch measurement capabilities previously in place, and prior to the rapid growth of Internet traffic volumes, this usage residually defaulted to "local" or "other" for separations study purposes. However, due to the significant growth of this traffic, SBC Communications Inc. (SBC) implemented procedures to identify this usage and jurisdictionally reclassify it in separations.

As we are able to identify Internet traffic, SBC is adjusting Part 36 jurisdictional traffic volumes to assign this usage to interstate (i.e., as in the case of FGA, usage is identified, removed from "local," and assigned to interstate or intrastate access). This classification of Internet usage is consistent with a) the FCC having asserted jurisdiction over ISP usage, b) the nature of the origination/termination characteristics of the traffic, and c) current Part 36 practice and industry procedures relating to the treatment of other "contaminated" services which are assigned to interstate. In other words, in keeping with the principle that where it is difficult to determine the jurisdiction of the traffic using a particular service through measurements or reporting, the service is considered "contaminated" (a service handling both interstate and intrastate calls) and may be directly assigned to interstate if the end-to-end interstate usage is more than ten percent of the total usage of the service (CC Docket Nos. 78-72 and 80-286, Decision and Order, released July 29, 1989).

Page Two  
January 20, 1998  
Ken Moran, Chief  
Accounting & Audits Division

These procedures have been implemented starting in 1997, going forward. However, for that Internet traffic which existed prior to 1997, SBC has no appropriate means to go back and retroactively capture such usage or adjust prior years' separations data. Therefore, any jurisdictional data previously reported prior to 1997, via ARMIS 01, 03, and 04 Reports may be slightly misstated in that ISP traffic was originally identified as intrastate (local) for separations and reporting purposes, instead of interstate, as discussed above.

Please feel free to call me at 202-326-8894 or Mr. Paul Cooper at 320-235-8111 should you have any questions or if further information is required.

Sincerely

A handwritten signature in black ink, appearing to read "B. J. Baumgartner". The signature is written in a cursive, somewhat stylized font. The first part "B. J." is written in a larger, more prominent script, followed by "Baumgartner" in a slightly smaller, more continuous script. The signature ends with a long, vertical flourish that extends downwards.



B. Jeannie Fry  
Director-  
Federal Regulatory

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February 23, 1998

Mr. Chuck Needy  
Assistant Division Chief-Economics  
Accounting and Audits Division  
Federal Communications Commission  
2000 L St., N.W.  
Room 812  
Washington, D.C. 20005

Dear Mr. Needy:

Your letter of February 12, 1998, requested further explanation concerning SBC Communications Inc. (SBC) jurisdictional separations adjustments for Internet usage, as provided to Mr. Ken Moran in my letter of January 20, 1998.

Attached is SBC's response to these questions. This is a preliminary response to each of your questions and, to the extent that you need additional significant information, SBC can supplement these responses at a later date.

As noted in the response to the questions, a complete analysis of the issues would be facilitated by also involving the CLECs, the other LECs and the ISPs. In addition, we ask that the FCC refer this matter to the Joint Board (which is currently examining Separations reform measures) in order that the state interests are also considered. Under the auspices of the Joint Board, all interested parties could be brought together to address and provide empirical data (usage measurements, etc.) in order to capture all internet usage. SBC would willingly participate in such a forum or assist in a further analysis or discussion of this issue.

We look forward to a continuing dialogue with you on this matter. Questions may be referred to me at 202-326-8894 or Paul Cooper at 314-235-8111.

Sincerely,

A handwritten signature in black ink that reads "B. Jeannie Fry". The signature is written in a cursive, flowing style.

Attachments

**Question 1.** What is the effect of this reclassification of internet traffic on the separation of 1997 costs for Southwestern Bell Telephone Company (SWBT), Pacific Bell, and Nevada Bell?

**Response:** Attachment 1 displays the effect on 1997 usage studies and annual revenue requirements of SBC's initial identification of Internet usage as interstate. These effects are small because the full measurement capabilities required to identify all Internet usage are, as yet, unavailable.

For some time, SBC has been concerned that Internet Server Provider (ISP) Internet usage has been improperly assigned to the intrastate jurisdiction because (like FGA) the FCC has allowed ISPs to connect to the network via a line side connection and at a local business rate. As a result, ISP customers are able to originate seven-digit dialed calls to reach the Internet and thus the measured switch usage for this interstate traffic appears to be local. Because the FCC has asserted jurisdictional rate making authority over ISP Internet usage and, consequently, the costs and usage in its access charge orders, and because of the mixed use nature of the traffic, the usage should (similar to FGA) be identified and assigned to the proper jurisdiction - interstate.

As of a result of these circumstances and due to SBC's recognition that substantial growth in Internet usage has occurred over the last few years, (and is still occurring), we began some time ago to investigate methods to identify Internet usage in order to be able to properly assign that usage to the interstate jurisdiction. Briefly, the capabilities that SBC has been investigating are:

1. SS7 signaling link-based recording of trunk usage for traffic destined for telephone numbers identified as the ISP point of presence for the ISP Internet customers.
2. Switch-based recording of usage destined for telephone numbers identified as the ISP point of presence for ISP Internet customers.
3. Studies based on statistically valid samples taken using SS7 signaling link or switch based recordings.

Proper identification of the telephone numbers which the ISP's customers dial to access the Internet over the Public Switched Telephone Network (PSTN) is important to any measurement process. Implementation of these capabilities should, when updated and tested, allow SBC to properly identify all ISP Internet usage and thus properly assign this usage and its related costs to interstate. There may be additional methods SBC has not yet identified (if ISPs were part of the

identification process, other means to identify this usage, would, no doubt, come to light) and SBC would be happy to work with the FCC, ISPs and others on this usage identification effort.

In the interim, until full identification capabilities are developed and deployed, SBC felt that it should, in good faith, as it was able to identify any Internet usage, properly assign that usage and costs jurisdictionally to interstate and to reduce intrastate cost and usage. We began that initial identification with ISP Internet customer usage originated and transported by SBC facilities to Competitive Local Exchange Carriers (CLECs). We did so because the total originating usage, including Internet, was readily identifiable (due to the interconnection agreements) and because we had (as discussed further in response to Question 3) developed a method relying on those measurements to identify ISP Internet usage. We also opted to let the FCC know about the successful results of our initial efforts to properly classify ISP Internet usage that we had been able to identify and, consequently, we sent our letter to Mr. Ken Moran on January 20, 1998.

**Question 2.** What percent of 1997 traffic is identified as Internet usage by SWBT, Pacific Bell, and Nevada Bell? Specifically, what is the effect of the reclassification on their 1997 measurements of local switching DEM, tandem switching MOU, exchange trunk MOU, interexchange trunk MOU-kilometers, and any other affected jurisdictional allocation factor?

**Response:** This information is contained in Attachment 1.

**Question 3:** How did SBC identify the 1997 Internet traffic volumes? If that identification was accomplished using "switch measurement capabilities", as your letter seems to suggest, how were the switches able to distinguish Internet traffic from other types of switched traffic? To what extent does such switch measurement capability differ among SWBT, Pacific Bell, and Nevada Bell? If identification instead was based on special studies, how were those studies performed? To what extent does this identification process differ among SWBT, Pacific Bell, and Nevada Bell?

**Response:** As discussed in our response to Question 1, we have been evaluating methods to identify all ISP Internet usage. Until these processes are fully implemented, switch measurements in conjunction with additional methods are being utilized to identify, where possible, ISP Internet usage. As also discussed in response to Question 1, we have been able to identify a portion of ISP Internet usage in 1997. Using recordings of seven-digit dialed originating traffic on our network which is originated and transported using SBC facilities to CLECs for transport to ISPs who will further transport the usage onto or beyond the Internet, SWBT performs monthly analyses to identify ISP Internet usage. These procedures are utilized in order to isolate individual telephone numbers with abnormal usage characteristics such as long holding times (associated with ISP Internet usage). Any numbers identified in this manner are then investigated and reports of the associated usage are compiled and used in reciprocal compensation and in the Jurisdictional Separations processes. This same procedure is applicable to California and Nevada. In the near future, when we begin to exchange this type of measured usage information with other LECs, we will implement this same procedure to identify further any ISP Internet usage originated by SBC and transported to those LECs.

**Question 4.** If SBC's Internet measurement capabilities were only partially deployed when 1997 Internet traffic was measured, can SBC estimate what portion of that Internet traffic was unmeasured? If so, what are the estimated unmeasured portions for SWBT, Pacific Bell, and Nevada Bell? How are those estimates obtained? Are they based, for example, on the relative number of local switches lacking such measurement capabilities?

**Response:** Currently, SBC does not have an estimate of total amount of Internet usage on its network, nor do we have an estimate of the total universe of seven-digit dialed ISP Internet traffic. We are confident, however, that Internet usage is growing significantly. As discussed in the response to Question 1, we are currently working on capabilities to identify all ISP Internet usage. There may be, however, methods of which we are currently unaware by which to broadly gauge the overall approximate level of ISP Internet usage by comparing local usage holding time studies, over time, from Separations data. In the meantime, as discussed in the response to Question 1 as more sophisticated switch measurement capabilities are deployed we will update our response.



**Question 5.** How did SWBT, Pacific Bell, and Nevada Bell determine that interstate usage constitutes more than ten percent of their Internet traffic?

**Response:** There are at least two bases for determining that well more than ten percent of current ISP Internet usage is interstate. At this time, both bases rely on indirect observations.

First, everything that can be observed about ISP Internet calling and usage (or expected usage), the design of the ISP Internet, services provided by the Internet and the economics of ISP Internet usage, indicate that usage is expected to be or is heavily interstate or international. For instance, advertisements by ISPs and articles about Internet usage (see Attachment 2 for an article regarding AT&T's use of the Internet) indicate that the Internet is/or is expected to be heavily used for interstate and international world-wide web (not local) calling. In a similar vein, the services provided (that can be accessed by telecommunications calls) will generate a large portion of interstate and international (not local) calling.

For instance:

- a) Chat lines routinely connect callers (in a manner similar to conference bridges) to other callers from all over the country and the world.
- b) E-mail is routinely used to send information to interstate (and international) locations.
- c) Web sites and databases are routinely accessed across state and national boundaries.
- d) Voice calling over the Internet is largely interexchange and if similar to current interexchange usage patterns, this ISP Internet usage would be heavily interstate.

These are but a few examples of how the Internet readily facilitates, with one or more of these services often being used during a single session, interstate or international calling. During each typical session, the Public Switched Telephone Network (PSTN) connection to the Internet is used continuously for long periods (often over 30 minutes per Internet call).

The design of the Internet involving a distributed, inter-operable packet-switched network in which an Internet user can obtain information from a computer (or talk to another Internet user via a keyboard or voice) in another state or country just as easily as obtaining information from across the state, also encourages heavy interstate and international usage. Finally, the pricing of Internet connections and services by the ISP (largely flat rate), combined with the ability to connect to the Internet via a seven digit dial-up access through the PSTN (without incurring access charges as a result of the FCC exemption from access for ESPs/ISPs and the requirement to connect ISPs through a line side switch connection at a local business rate), have contributed to the phenomenal growth of users connected to the Internet in the last few years and have provided them with an economic incentive to use interstate services (voice and data) which are much less costly, or even viewed by the customer to be free (after paying the ISP's flat rate), when compared to traditional interstate and international telephone or other services in which a fee per minute for service is charged.

The services provided by the Internet, its design and its economics, when compared to traditional services, encourage users to connect for long periods, access multiple services and, consequently, encourage the ISP Internet customer to use the Internet for interstate and international calling for well more than 10% of their ISP Internet usage.

Second, an analysis of Internet backbone usage performed by a CLEC and its ISPs in Texas indicates that well more than 10% of an Internet customer's usage flows over the Internet backbone to interstate and international destinations. Although the study results were incorrectly calculated and presented, these results clearly show that most ISP Internet usage is not local but is predominately interexchange, interstate and international. The study purports to show that only 3% of ISP Internet usage flows over the Internet backbone and that consequently, 97% of the Internet usage allegedly stays within the local calling area. However, to calculate the 3%, Internet backbone packet usage (converted to seconds) was compared to total PSTN usage delivered to the ISP. This calculation effectively compared a continuous stream of packetized operation (without waiting time between packet transmissions which is the human/computer interface time as discussed in Attachment 3) to the total time that the PSTN was in operation. The analysis assumed that all backbone packet waiting time for calls is assigned to local. In other words, when an end user initiates an interstate call to or beyond the Internet, all time (between keystrokes, between words or syllables, etc. or packet waiting time) was not assigned in the CLEC's analyses to the backbone packet usage call, but was defaulted to local. From the standpoint of a typist at a computer keyboard, the method used by the CLEC to calculate the 3% without waiting time roughly means that the end user

would be typing at a rate of 96,000 words per minute. The difference in the 96,000 words per minute and what normally can be expected of a typist is the packet waiting time that the analysis inappropriately defaulted to local. This difference which should be included in the backbone Internet usage, as discussed and illustrated in further in Attachment 3, results from the human/computer interface. If the study properly compared Internet backbone usage including packet waiting time (in other words, the entire time for the end user's call), the percentage of the Internet customers usage, which is transported and terminated beyond the local calling area to interstate and international destinations, is much greater than 3% or 10%.

For these reasons, SWBT has concluded that at least 10% of usage to the Internet is interstate. Detailed analyses of all Internet usage is complicated by:

- a) Measurement capabilities to identify total Internet usage;
- b) The mixed use nature of Internet usage (i.e., an ISP Internet customer can perform multiple operations, access multiple services at multiple localities all within an Internet session); and,
- c) The fact that one carrier (i.e., a LEC such as SWBT) is unable to fully analyze the end-to-end or station-to-station call characteristics.

We are willing to participate in any further FCC analysis and will assist the FCC in any way we can. We do believe however, that if the FCC should undertake further analysis of this issue, it will need to involve not only SWBT and other LECs, but also ISPs as well as CLECs and IXC's who may be connected to ISPs.

**Question 6.** Is SBC able to determine what share of information-service-provider (ISP) services—that are serving SBC customers—are not located in the same state in which their customers reside? If so, what is the relative share of these out-of-state servers and how is this share identified? Further, what is the share of Internet traffic that is routed to these out-of-state servers and how is that share identified?

**Response:** Definitive information is not currently available to SBC. It would appear to SBC that the information would only be available from the ISPs. If, as discussed in response to Question 5, the FCC wishes to pursue a broader analysis involving CLECs and ISPs, then this is a question that should be posed to ISPs concerning their Internet customers. As a point of clarification, ISPs are

not serving SBC customers, they are using, like IXC's, SBC telephone company affiliate facilities to originate and transport calls from their customers. The ISP collects the retail revenues for these customers, and like IXC's would have had to (but for the FCC exemption) pay access to LEC's and CLEC's for use of their facilities to originate and transport ISP customer Internet usage.

**Question 7.** In SBC's service territory, what share of 1997 Internet traffic was terminated by SBC, by CLEC's, and by other Carriers?

**Response:** Based on the limited measuring capabilities that we were able to deploy in 1997, SBC was able to identify Internet usage originating to CLEC's. SBC also provided CLEC's with ISP Internet numbers to assist them in identifying Internet usage originated by their end users and sent to SBC. At this point, however, SBC is unable to determine if CLEC's are actually identifying this usage, so we are unable to determine what portion of this Internet traffic was delivered to our network. Again, if a broader FCC analysis is contemplated, this is a question that should, appropriately, be directed to ISPs and possibly CLEC's.

**Question 8.** Is any portion of SBC's Internet traffic carried on its packet-switched networks? If so, what were those portions in 1997 for SWBT, Pacific Bell, and Nevada Bell? Also, how were those portions identified?

**Response:** If this question concerns how many ISPs are using alternate routing to the PSTN, in the time available, we are not able to provide this information. We will investigate this and provide the answer in the near future.

If the question concerns the use by SBC's Internet affiliates of packet switching in its network to route Internet usage, then the answer is yes. They, like other ISPs, use packet-switched networks to route their traffic.

**INTERNET RECLASSIFICATION IMPACT ON 1997 INTERSTATE COSTS**

**ESTIMATED ANNUAL REVENUE REQUIREMENT**

(\$ 000)

	Change in Intrastate*	Change in Interstate
ARKANSAS	(288)	288
KANSAS (Note 1)	—	—
MISSOURI	(311)	311
OKLAHOMA	(2,514)	2,514
TEXAS	(3,078)	3,078
SWBT	(6,191)	6,191
PACIFIC BELL	(29,172)	29,172
NEVADA BELL (Note 1)	—	—

Note 1- Not Currently Available

\*Assumes the use of the Interstate rate of return in the calculation.

**INTERNET RECLASSIFICATION IMPACT ON 1997 ALLOCATION FACTORS**

	<b>Change in Intrastate</b>	<b>Change in Interstate</b>	<b>% Change</b>
<b>SWBT - ARKANSAS</b>			
Local Switching DEM	(0.001783)	0.001783	1.2%
Tandem Switching MOU	(0.004081)	0.004081	1.3%
Exchange Trunk MOU	(0.004350)	0.00435	0.7%
Interexchange Trunk Conv. Minutes	0	0	0%
Interexchange Trunk Conv. Minutes-KMeters	0	0	0%
<b>SWBT - KANSAS (Not Currently Available)</b>			
<b>SWBT - MISSOURI</b>			
Local Switching DEM	(0.000162)	0.000162	0.1%
Tandem Switching MOU	(0.001264)	0.001264	0.5%
Exchange Trunk MOU	(0.000348)	0.000348	0.1%
Interexchange Trunk Conv. Minutes	0	0	0%
Interexchange Trunk Conv. Minutes-KMeters	0	0	0%
<b>SWBT - OKLAHOMA</b>			
Local Switching DEM	(0.009216)	0.009216	6.7%
Tandem Switching MOU	(0.047060)	0.04706	15.2%
Exchange Trunk MOU	(0.009555)	0.009555	1.3%
Interexchange Trunk Conv. Minutes	0	0	0%
Interexchange Trunk Conv. Minutes-KMeters	0	0	0%
<b>SWBT - TEXAS</b>			
Local Switching DEM	(0.001909)	0.001909	1.7%
Tandem Switching MOU	(0.009500)	0.0095	3.5%
Exchange Trunk MOU	(0.004927)	0.004927	1.1%
Interexchange Trunk Conv. Minutes	0	0	0%
Interexchange Trunk Conv. Minutes-KMeters	0	0	0%
<b>PACIFIC BELL</b>			
Local Switching DEM	(0.008981)	0.008981	8%
Tandem Switching MOU	(0.066269)	0.066269	31.4%
Exchange Trunk MOU	(0.035226)	0.035226	9.4%
Interexchange Trunk Conv. Minutes	(0.000621)	0.000621	0.2%
Interexchange Trunk Conv. Minutes-KMeters	(0.000373)	0.000373	0.1%
<b>NEVADA BELL (Not Currently Available)</b>			

calls via the Net Internet could revolutionize phone service

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## Cheap calls via the Net Internet could revolutionize phone service

By Steve Rosenbush

Tues., Feb. 10, 1998

FINAL EDITION

Section: MONEY

Page 1B

NEW YORK — Almost a year ago, AT&T research chief David Nagle demonstrated an Internet telephone call during a two-day meeting with stock analysts.

He placed the call from a computer, not a telephone. The sound quality was terrible. The delays were annoying.

The story was far different last month when AT&T executives met once again with Wall Street analysts. President John Ziegler showed off a new kind of higher quality, phone-to-phone Internet call. And the demonstration was accompanied by a stunning announcement that AT&T would be the first major U.S. long-distance carrier to jump into the emerging market now known as Internet Protocol (IP) telephony. It is basically a cheaper, more efficient technology that could allow millions of AT&T phone calls to travel via the Internet instead of the regular phone network.

The shift at AT&T is powerful evidence of a remarkable change that has occurred in telecommunications during the past year. Telephone calls over the Internet, dismissed not long ago as a high-tech version of ham radio, are suddenly taken very seriously by the communications establishment.

That raises the prospect of lower prices and new services for consumers and major changes in the structure of the industry now dominated in the USA by AT&T, MCI, Sprint, GTE and the regional Bell phone companies. AT&T's trial begins during the second quarter. Qwest Communications and a few other carriers already allow people to make calls over the Internet for 5 cents to 7.5 cents a minute.

By 2002, the Internet could account for 11% of U.S. and international long-distance voice traffic, up from just 0.2% last year, predicts analyst Mark Winther of International Data Corp. "Internet telephony is a reality, and telcos have surprisingly awakened to that rather early," analyst David Goodtree of Forrester Research says. "It will be the catalyst that forces the total restructuring . . . of the profits of all telcos worldwide."

Perhaps this forecast was the wakeup call: IP telephony could eliminate the profits of U.S. long-distance carriers by stealing just 6% of U.S. telephone traffic, the International Telecommunications Union warned in a report last year.

Evidence of the hastening convergence of the phone network and the Internet is overwhelming.

The same day that AT&T announced its Internet telephone plans, MCI revealed a pact with Netspeak, a company that makes computers that connect phone networks to the Internet. Bell Atlantic announced a day later that it wants to build high-speed Internet transmission lines across its local phone territory. US West announced the following day that it was forming an Internet-development alliance with equipment maker Cisco Systems.

calls via the Net Internet could revolutionize phone service

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America Online, the country's largest on-line service, is testing IP telephone service with 5,000 users. Tele-Communications Inc., the country's largest cable TV operator, said in December that it would begin offering Internet phone service in late 1999. Last month, start-up Level 3 said it would build the nation's first telephone network based entirely on Internet standards.

"Over the next few years, you will see very rapid growth in IP telephony," says Joe Nacchio, CEO of Qwest, which is constructing a 16,000-mile fiber network that uses both traditional phone switching technology and the Internet. "I think it will be unstoppable." He already offers consumers IP telephony in nine Western cities.

#### **Humble beginnings**

Internet telephony barely existed until February 1995, when an Israeli company, VocalTec, introduced a software program that allowed people to speak to each other using their PCs and a microphone.

"It was like ham radio," recalls analyst Francois de Repennigny of Frost & Sullivan, an early user. People could only talk to other personal computer users who ran the same software and happened to be logged onto the Internet at the same time.

The medium took a huge step forward in 1996, when VocalTec unveiled a "gateway" computer that connects the Internet to the phone network. That allowed people to speak to each other over the Net using regular phones instead of PCs.

The advance was a major break with tradition. The basic design of the phone network hasn't changed since AT&T invented it more than 100 years ago. It's a vast roadway where every call has its own lane, or circuit. A telephone call ties up an entire circuit, even when people pause between words or put the phone down to answer the doorbell. The Internet is much more efficient. Calls travel a short distance over copper phone lines to the nearest phone company office, where a gateway computer converts the sound of the voice into the ones and zeros of computer language and breaks it into little pieces known as packets. Compressed packets are thrust into the Internet or data network, where they share lines with other transmissions, such as e-mail.

The result is that Internet calls are cheaper than regular calls. "This is going to be the stake that finally drives a hole through the heart of the ... exorbitant costs associated with traditional voice communications," says Jim Courter, president of IDT, which charges 5 cents a minute for long-distance calls over the Internet. "The cost of calls is going to be dramatically reduced."

IP calls are especially cheap now, because they are exempt from fees long-distance carriers must pay local carriers for access to the local networks, where all long-distance calls begin and end. Local carriers want that to change, but IP technology would still be more efficient than a regular long-distance call.

Cable TV companies and Internet service providers entering the \$80 billion long-distance business are sure to benefit. By 2002, the Internet will drain \$3 billion in annual revenue from U.S. long-distance carriers, Forrester Research estimates. That's about 4% of their revenue base. About \$2 billion of that will go to new long-distance providers, and about \$1 billion will go directly to telephone users in the form of price cuts.

#### **Profitable niches**

Others, too, will benefit as IP phone service takes hold:

- Up to 10% of the world's fax market, which generates \$45 billion in telecom revenue a year, will move to the Internet in two or three years, says CEO David Friend of FaxNet, a long-distance carrier just for faxes.
- "The \$18 billion market for calls from the United States to foreign destinations will be the first and biggest target of Internet telephony," Forrester says. Key



... calls via the Net Internet could revolutionize phone service

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reason: The Internet bypasses international telephone networks, which are often outrageously expensive. USA Global Link announced plans in early 1997 to build an IP-based network just for international calls.

- A company can easily slash its phone budget 35% by moving its voice traffic to the same network that handles its data transmissions, says Eric Benhamou, CEO of Internet equipment maker 3Com. A Forrester survey of 52 Fortune 1000 companies finds that more than 40% of telecom managers plan to move some voice or fax traffic to the Internet by 1999.

One major force driving the rapid growth of the Internet phone business is that the basic technology behind the Internet is available to the public for free. But today's Internet has drawbacks, too. It is dogged by traffic jams that can occur during peak usage. Even users with high-speed access can get bogged down when the network is overloaded. Newer versions of the Net will be able to assign higher priority to certain kinds of transmissions, such as phone calls.

AT&T's Nagle serves on a presidential advisory committee that is guiding the development of Internet 2, a high-speed network that will be available in several years.

Meanwhile, he says the quality and security of IP telephony on the existing Internet is rising. The implications of that are just reaching consumers.

Bruce Ravenel, TCI's senior vice president for telecommunications, says TCI's 12 million customers won't be able to tell the difference between a regular phone call and an IP call. "The technology inside the network will be IP, but the experience for the customer is that they will make a 'toll' quality phone call, just like they do today with conventional telephone networks."

John Roth, CEO of equipment maker Northern Telecom, goes even further. He sees the day when voice calls will be virtually free and video and data transmission will be the real moneymaker.

Who will dominate?

Newcomers might have an edge in the market to provide this new breed of phone service. "Give me one example of any company in any industry that has managed to deal with an economic change of this magnitude and be dominant in the next era," says James Crowe, CEO of Level 3. "There isn't one."

Even old-line phone carriers that develop a good strategy for IP telephony might run into trouble, because they will need to take huge charges to write off their old networks, says Francis McInerney, partner with North River Ventures, an investment and consulting group.

But Nagle says big phone companies already have paid off many of their network investments. And new data networks will lower costs for traditional carriers, so profit margins won't be gutted by falling prices. Finally, he notes, history shows that traffic on communications networks rises as prices fall.

Nagle says the fact that AT&T has been able to create an Internet phone offering between 1997 and 1998 is proof that it can compete.

"The industry is moving more quickly. And more important for us, we're moving a lot more quickly," he says. "We have realized the potential and importance of the Internet, and we are resolved to be leaders in that industry."



# How phone calls are made over the Internet

## 1 The caller

The caller dials a toll-free number and an ID number that connects him or her to a gateway computer, a bridge between the regular phone network and the Internet. The caller then dials the number of the party in Rome. The call travels the phone network until it gets to the gateway.

## 2 The gateway

The gateway digitizes the caller's voice, turning it into the ones and zeros of computer language.

## 3 Digitization

The gateway breaks the digitized voice into pieces known as packets. A typical packet includes 10 to 30 milliseconds worth of conversation. Each packet is coded with the second party's phone number, just as a letter is put in an envelope with an address.

## 4 Compression

The gateway compresses the digitized packets.

## 5 Transmission

The gateway thrusts the compressed packets into the Internet, where they share wires with other data transmissions.

## 6 Routers

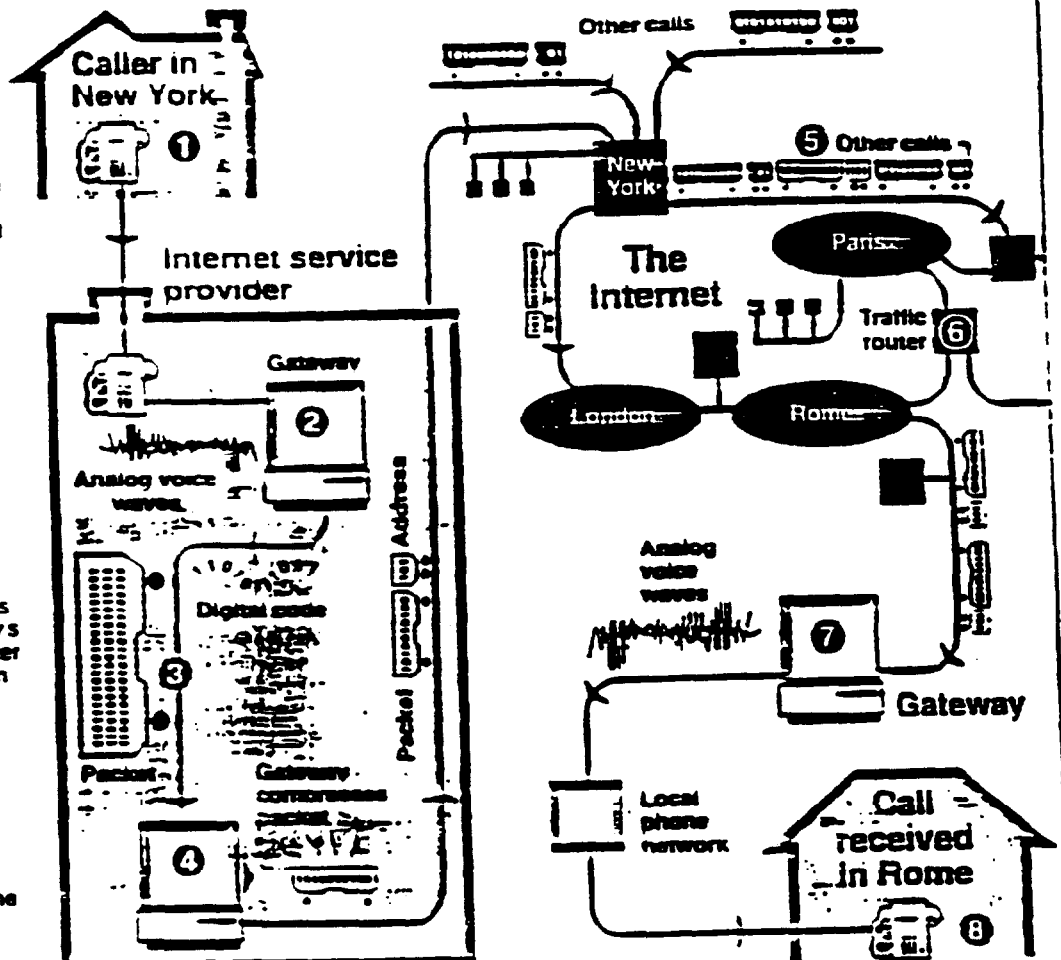
The packets travel the Internet, passing through routers, computers that read the addresses on each packet and assign them transmission lines.

## 7 Back to analog

The packets finally arrive at a gateway that decompresses them and converts the digital signal back to analog.

## 8 Connection

The gateway transfers the call to the local phone network, which delivers it to the intended party.



### Illustration of Proper Jurisdictional Assignment of Internet Call Usage

The following illustration assumes a customer accesses his Internet Service Provider (ISP) using a dial up 33.3 kbs modem and the loop from the customer's premise to his local dial serving office has a normal 56,000 kbs capacity. The following two examples illustrate the proper jurisdictional separations treatment of the PSTN usage at the customer's local dial office.

**Example 1:** Customer dials up ISP and accesses an Internet server in another state. He then begins entering data at his PC keyboard.

Rate of entering information:

75	words per minute entered from keyboard
<u>x 5</u>	characters per word, average
375	characters per minute
<u>x 8</u>	bits per character
3000	bits per minute
<u>÷ 60</u>	seconds per minute
50	bits per second entered

If customer keys data for 10 minutes, he would send 30,000 bits of data. He would use only 0.09% (30,000 bits/33.6Mbits) of his loop transmission capacity, or the equivalent of 0.01 minutes of transmission capacity, but his serving end office switch would be in use for the entire 10 minutes. This difference results from the human/computer interface. In other words, the network waiting time resulting from the inability of the end user to originate and send data at the speed which the LEC's PSTN, or the ISP's packet switched network can accommodate and transport. This human/computer interface time is still part of the call usage and, as a result, the local dial switch would properly measure 10 minutes of interstate usage. It would not be appropriate to say that you only talked for 0.09% of the 10 minutes, so only 0.09% of the usage is interstate and 99.91% is intrastate.

**Example 2:** Customer dials up her ISP and selects a website in another state. She then sends a data file from her PC to the website and then stays on line for a total of 10 minutes.

Rate of entering information:

1,000,000	bits of data in the transmitted file
<u>÷ 33,300</u>	bits per second modem transmission
30	seconds to transmit file of data

For the 10 minutes that customer is connected to the ISP, she would have used 3% (1Mbits/33.6Mbits) of her transmission capacity; however, since the customers' serving end office switch would be in use for the entire 10 minutes, there would properly be 10 minutes of interstate usage. As in Example 1, due to the human/computer interface element, as mentioned above, it would not be appropriate to assign 3% of the 10 minutes to interstate and 97% to intrastate.



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March 15, 1998

**Ex Parte**

Ms. Magalie R. Salas  
Secretary  
Federal Communication Commission  
Room 222  
1919 M Street, N.W.  
Washington, D.C. 20554

Re: CC Docket No. 80-286, Jurisdictional Separations Reform and Referral to the  
Federal-State Joint Board

CC Docket No. 96-45, Federal-State Joint Board on Universal Service

CC Docket No. 96-262, Access Charge Reform

CCB/CPD CC Docket No. 97-30, Request by ALTS for Clarification of the  
Commission's Rules Regarding Reciprocal Compensation for Information Service  
Provider Traffic

Dear Ms. Salas:

This is in reference to the February 27 meeting among representative of the Commission, Southwestern Bell Telephone Company (SWBT), and SBC Telecommunications, Inc. concerning SBC Communications Inc. (SBC) jurisdictional adjustments for Internet usage. I am providing additional information pertaining to that matter.

This information, in the form of case or order citations, conclusively demonstrates that the Commission has already asserted jurisdiction over Internet Service Provider (ISP) traffic, that the Commission has never considered ISP traffic to be a local service, that ISP traffic is predominately interstate in nature and, therefore, that it is necessary and appropriate that such traffic be assigned to the interstate jurisdiction in Part 36 jurisdictional separations procedures. This information also demonstrates that, despite claims made to the contrary by others, this assignment is required by the end-to-end interstate nature of Internet traffic in light of the Commission's current separations rules concerning "mixed-use" facilities.

Ms. Magalie R. Salas  
Page two  
March 25, 1998

On March 19, 1998, in the United States District Court for the Western District of Texas (Midland - Odessa Division), SWBT filed an appeal of the Texas Public Utility Commission decision on the Time Warner complaint regarding Internet traffic as local. SWBT will provide the Commission a copy of supplemental filings in that appeal that will contain information and case law that bear on the jurisdiction of Internet traffic.

Finally, two cardinal principles which underlie the very purpose of the Part 36 Jurisdictional Separations process support SBC's approach. The first is that the authority of each of two regulators must be confined "to its own proper province" and the second is that, as between the two jurisdictions, neither intrastate nor interstate ratepayers shall be forced to "bear undue burden." *Smith v. Illinois*, 282 U.S. 133, 149, 151 (1930). The Commission has already asserted jurisdiction over the subject of ESP (including Internet) traffic, and cannot now deny the interstate nature of such traffic. Moreover, recognizing the interstate nature of such traffic ensures that intrastate ratepayers do not bear an improper burden, in the form of costs allocated to them, that should be imposed on the interstate jurisdiction, wherein the true costs are situated.

This matter should be referred to the Joint Board so that an acceptable industry approach designed to fully identify and measure all Internet traffic may be pursued in an efficient and practical fashion by all affected parties.

SBC thanks the Commission for its attention to this very important matter. An original and one copy of this letter are being submitted. Acknowledgment and date of receipt of this transmittal are requested. A duplicate transmittal letter is attached for this purpose.

Please include this letter in the record of this proceeding in accordance with Section 1.1206(a)(2) of the Commission's Rules.

Sincerely,



Attachment

CC: Lynn Vermillera  
Kaylene Shannan  
Chuck Needy  
Tamara Preiss  
Ken Moran

## **DETERMINATION OF INTERNET ACCESS AS INTERSTATE**

- I. Jurisdiction Over Internet Traffic**
- II. Internet Traffic Always Considered Interstate Access**
- III. Internet Service Provider Traffic As Interstate Traffic**

## **I. Jurisdiction Over Internet Traffic**

**Computer III Remand Proceedings: Bell Operating Company Safeguards; and Tier 1 Local Exchange Company Safeguards, Notice of Proposed Rule Making and Order, 6 FCC Rcd 174 (1990):**

"Section 3(a) of the Act gives the Commission jurisdiction over interstate communications 'between the points of origin and reception.'" (n. 101) (emphasis added)

**Southern Pacific Communications Company Tariff FCC No. 4, Memorandum Opinion and Order, 61 FCC 2d 144 (1976):**

"[T]he states do not have jurisdiction over interstate communications.... 'The key issue in determining this question before us is the nature of the communications which pass through the facilities, not the physical location of the lines. *United States v. Southwestern Cable Co.*, 392 U.S. 157, 168-9 (1968). As we have often recognized, this Commission's jurisdiction over interstate communications does not end at the local switchboard, it continues to the transmission's ultimate destination. *U.S. v. AT&T*, 57 F. Supp. 451 (S.D.N.Y. 1944).'" (para. 6) (emphasis added)

**Petition for Emergency Relief and Declaratory Ruling filed by the BellSouth Corp., Memorandum Opinion and Order, 7 FCC Rcd 1619 (1992):**

"Our jurisdiction does not end at the local switch but continues to the ultimate termination of the call. 'The key to jurisdiction is the nature of the communication itself rather than the physical location of the technology.' 'Jurisdiction over interstate communications does not end at the local switchboard, it continues to the transmission's ultimate destination.' .... 'An out-of-state call to BellSouth's voice mail service is a jurisdictionally interstate communication, just as is any other out-of-state call to a person or service.'" (para. 12) (emphasis added)

## **II. Internet Traffic Always Considered Interstate Access**

Beginning in 1983 with CC Docket No. 78-72 to the present, the Commission has never considered traffic for Internet service, an enhanced service, to be local. On the contrary, enhanced service provider (ESP) calls are considered as interstate access subject to access charges with the only question being when to apply access charges.

**MTS and WATS Market Structure, Memorandum Opinion and Order, 97 FCC 2d 682 (1983):**

A primary objective of Phase I of CC Docket No. 78-72: "elimination of unreasonable discrimination and undue preferences among rates for interstate services". (para. 3)



Attachment  
Page 3 of 9

ESPs use local exchange facilities to complete interstate calls. "Among the variety of users of access service are ... enhanced service providers.... In each case the user obtains local exchange services or facilities which are used, in part or in whole, for the purpose of completing interstate calls which transit its location... [An] enhanced service provider might terminate a few calls at its own location and thus would make relatively heavy interstate use of local exchange services and facilities to access its customers." (para. 78) (emphasis added)

The nature of communication determines jurisdiction. If it is not practical to separate the interstate from intrastate traffic, then traffic is interstate. "Since the nature of the communications determines jurisdiction, Ward v. Northern Ohio Telephone Company 300 F. 2d 816 (6<sup>th</sup> Cir. 1962), it would be most difficult to show that any switched private line within a state is not jurisdictionally interstate since it is not practical to separate the interstate from the intrastate traffic." (n. 58) (emphasis added)

The Commission ordered a transition to avoid rate shock while developing a comprehensive plan to identify usage. Once procedures in are place, access charges could be applied to all users on an equal basis. "Other users who employ exchange service for jurisdictionally interstate communications, including ... enhanced service providers ... would experience severe rate impacts were we immediately to assess carrier access charges upon them. The case for a transition to avoid this rate shock is made more compelling by our recognition that it will take time to develop a comprehensive plan for detecting all such usage and imposing charges in an evenhanded manner." (para. 83) (emphasis added)

**WATS-Related and Other Amendments of Part 69 of Commission's Rules, Second Report and Order 1986 FCC LEXIS 2788, 60 Rad. Reg. 2d (P&F) 1542 (1986):**

Eliminate the exemption from access charges for resellers and data and telex carriers. Rate shock was no longer sufficient justification for exemption. The "...carriers generally paid the local business line rate for their access lines in lieu of being assessed carrier's carrier charges." "We noted that the rate shock concerns that had initially prompted us to exempt ... carriers from paying access charges no longer provided sufficient justification for the exemption." (para. 2)

ESP exemption was only to give transitional relief. "...[T]elex and data carriers, like carriers...use ordinary subscriber lines and end office facilities through their dial-up connections, and should therefore pay the same charges as those assessed on other interexchange carriers for their use of these local switched access facilities. Our intention in adopting the exemption ... was not to exempt carriers who provide non-MTS/WATS-type services permanently from carrier access charges, but only to grant them some transitional relief." (para. 11)

The rule change did not affect the ESP access charge exemption. The sudden imposition of access could have severe impacts on ESPs; therefore, the need for transition to access charges arose. "We also recognized...the sudden imposition of access charges could have a severe economic impact on these enhanced service providers and that there might be a need for an access charge transition for these entities." (para. 15)

**Amendments of Part 69 of the Commission's Rules Relating To Enhanced Service Providers, Notice of Proposed Rule Making, 2 FCC Rcd 4305 (1987):**

In 1983 FCC adopted a comprehensive "access charge" plan. Tentatively conclude now appropriate that ESPs like providers of interstate basic services pay access. "At that time, we concluded that immediate application of this plan to certain providers of interstate services might unduly burden their operations and cause disruptions in provision of service to the public. Therefore, we granted temporary exemptions from payment of access charges to certain classes of exchange access users, including enhanced service providers....We tentatively conclude that it is now appropriate that enhanced service providers, like providers of interstate basic services, be assessed access charges for their use of local exchange facilities." (para. 1) (emphasis added)

"In the access charge proceeding, the first of our four primary goals was the 'elimination of unreasonable discrimination and undue preferences among rates for interstate services.' Specifically, our objective has been to distribute the costs of exchange access in a fair and reasonable manner among all users of exchange access service ....We...initially intended to impose interstate access charges on enhanced service providers for their use of local exchange facilities to originate and terminate their interstate offerings. Interstate enhanced services often use common lines and local exchange switches in the same manner as MTS and some MTS equivalent services." (para. 2) (emphasis added)

The access charge exemption was not intended to be permanent. "Because of these concerns about rate shock, we exempted certain exchange access users from the payment of certain interstate access charges in the First Reconsideration. At that time, we did not intend those exemptions to be permanent, and we have since eliminated several of them. For example, in CC Docket No. 86-1, we considered the question of access charge exemption for resellers. In the First Report and Order in that docket, we eliminated the exemption from all access charges for WATS resellers and from traffic-sensitive access charges for MTS resellers, ... We said there that our goal was to promote competition, not to protect competitors." (para. 4) (emphasis added)

"[I]n the First Reconsideration, we granted enhanced service providers an exemption .... As a result, enhanced service providers currently pay local business rates ... for ... switched access connections to local exchange company central offices." (para. 6)

The FCC objective is a set of rules that provide for recovery of costs of exchange access used in interstate service in a fair reasonable and efficient manner regardless of designation as carriers, enhanced service providers, or private customers. The Commission expressed concern that local business rates paid by enhanced service providers do not contribute sufficiently to costs of exchange access facilities they use to offer services to the public. "Enhanced service providers, like facilities-based interexchange carriers and resellers, use the local network to provide interstate services." (para. 7) (emphasis added)

The FCC restated that "concerns with 'rate shock' cannot sustain an uneconomic pricing structure in perpetuity." (para. 8)

In effort to resolve the difficult issue of measuring ESP usage, FCC asked parties to comment on the method of determining interstate and intrastate usage of enhanced services. Parties were specifically asked to comment on the possibility of using Entry/Exit Surrogate method like that used to estimate jurisdictional usage for Feature Group A and Feature Group B services. (para.11) (emphasis added)

**Amendments of Part 69 of the Commission's Rules Relating to Enhanced Service Providers, Order 3 FCC Rcd 2631 (1988):**

Even though in 1987 the intention was to remove the ESP exemption, because regulatory and judicial events made it an unusually volatile period for the enhanced service industry, the Commission decided to not eliminate the exemption from interstate access charges for enhanced service providers at that time. " [A]ny discrimination that exists by reason of the exemption remains a reasonable one so long as enhanced services industry remains in the current state of change and uncertainty." (para.1)

**Amendments of Part 69 of the Commission's Rules Relating to the Creation of Access Charge Subelements for Open Network Architecture, Notice of Proposed Rule Making, 4 FCC Rcd 3983 (1989):**

The Commission analyzed the impact of allowing the existing exemption of enhanced service providers from interstate access charges to remain. The analysis discussed the impact on the jurisdictional allocation of costs to interstate that result from not measuring the use of local exchange facilities for accessing ESP services.

In its analysis, the Commission states that the "...present treatment of the interstate traffic of ESPs appears to be providing significant benefits to ESPs while minimizing disruption of state policies." (para. 33) (emphasis added)

"Maintaining the current exemption arguably places some burden on ordinary interstate ratepayers since ESP customers do not contribute to the interstate share of local exchange NTS costs to the same extent that customers of other interstate services do....[W]hile the

present ESP exemption affects the NTS charges paid by other access customers, it does not seem to have a substantial effect on TS charges. Unlike NTS costs, which are separated between the interstate and intrastate jurisdictions on the basis of a flat-rate allocator, TS costs are separated on the basis of relative usage. ESP traffic over local business lines is classified as local traffic for separations purposes, with the result that TS costs associated with ESP traffic are apportioned to the intrastate jurisdiction, and are recovered through intrastate charges paid by ESPs and other purchasers of intrastate services. Thus, assuming there is an approximate match between interstate TS costs and rates, the present ESP exemption would not seem to have a significant impact on interstate TS access charges." (para. 34) (emphasis added)<sup>1</sup>

"As stated *supra*, para. 34, traffic over 'local' business lines is treated as intrastate for purposes of separating local exchange TS costs. A reclassification of ESP traffic would therefore increase the interstate revenue requirement for TS access elements." (n. 84) (emphasis added)

The Commission's analysis in Paragraph 34, above, also demonstrated the outcome when it becomes difficult to measure the jurisdiction of traffic transported over the local exchange network to a local business line purchased by an ESP. The measurement difficulty is the result of decisions to allow the ESP to use the LEC network to provide a very traffic intensive service at a flat-rate charge and be exempt from access charges. Like Feature Group A traffic, calls that use local exchange facilities to access an enhanced service providers facility appear to be local and, if not identified and jurisdictionally reclassified, this residual traffic will cause additional TS costs to be apportioned to the intrastate jurisdiction for recovery through charges for intrastate services.

In discussing jurisdictional measurements, the Commission stated that for "...FGA and FGB access arrangements, LECs generally lack the technical ability to identify and measure jurisdictional usage. The users of FGA and FGB...generally supply this.

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<sup>1</sup> A February 4, 1998 letter addressed to Mr. Moran of the FCC from the Association for Local Telecommunications Services (ALTS) incorrectly characterized a sentence in Paragraph 34, above, as the Commission's "long recognized" determination that ESP traffic over local business lines was intrastate local service. ALTS took the sentence out of context, as clearly demonstrated by a more complete reading of the Commission's document. In fact, ALTS' characterization is contrary to prior and subsequent determinations of the Commission. Considering the balance of the FCC document referred to by ALTS shows that the Commission was merely analyzing the impact of the interstate access charge exemption on interstate traffic sensitive access charges, and noting that until measurement procedures were in place, the ESP usage would be incorrectly assigned by separations measurement procedures to local. (see *MTS and WATS Market Structure, Memorandum Opinion and Order*, 97 FCC 2d 682 (1983). para. 82)

Attachment  
Page 7 of 9

information by reporting the percentage of interstate use (PIU) of their traffic.... The *Federal-State Joint Board in CC Docket No. 85-124* recently recommended that the Entry/Exit Surrogate (EES) method be used to determine the originating location of a call for purposes of computing a PIU for FGA and FGB traffic. ESPs that purchase FGA and FGB connections in lieu of local business lines, apparently provide LECs with PIUs." (para. 27)

"Under the EES method of jurisdictional determination, calls that enter an IXC network in the same state as that in which the called station is located are deemed to be intrastate, and calls that terminate in a different state from their IXC point of entry are considered interstate." (n. 65)

The jurisdictional measurement of ESP traffic is difficult. The Commission recognized... "that jurisdictional measurement of enhanced service traffic may present particular difficulties. ESPs may not always be able to discern the ultimate destination of a call (for example, when traffic is transmitted from one packet network to another) and there may be questions concerning whether a single call can have both interstate and intrastate components (for example, when a computer user during a single session interacts sequentially with a number of data bases in different states). Nevertheless, we think the EES method, perhaps with some reasonable accommodations for special circumstances presented by certain types of enhanced traffic, should be workable for ESPs." (n. 67) (emphasis added)

### III. Internet Service Provider Traffic As Interstate Traffic

**Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act, as amended, 11 FCC Rcd 21905 (1996):**

The Internet is an "interconnected global network of thousands of interoperable packet-switched networks" by which the ISP "connects the end-user to an Internet backbone provider that carries traffic to and from other Internet host sites." (n. 291)

**MTS and WATS Market Structure, Memorandum Opinion and Order, 97 FCC 2d 682 (1983):**

"Among the variety of users of access service are facilities-based carriers, resellers (who use facilities provided by others), sharers, privately owned systems, enhanced service providers, and other private line and WATS customers, large and small, who 'leak' traffic into the exchange. In each case the user obtains local exchange services or facilities which transit its location and, commonly, another location in the exchange area. At its own location the user connects the local exchange call to another service or facility over which the call is carried out of state... A facilities-based carrier, reseller or enhanced service provider might terminate few calls at its own location and thus would make relatively heavy interstate use of local exchange services and facilities to access its customers." (para. 78) (emphasis added)

**Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing Usage of the Public Switched Network by Information Service and Internet Access Providers, 11 FCC Rcd. 21354 (1996):**

The Commission makes reference to: "interstate information service providers, such as Internet service providers." (para. 19) (emphasis added)

"Usage of interstate information services, and in particular the Internet and other interactive computer network, has increased dramatically in recent years." (para. 282) (emphasis added)

"[A]lthough enhanced service providers (ESPs) may use incumbent LEC facilities to originate and terminate interstate calls, ESPs should not be required to pay interstate access charges." (para. 284) (emphasis added)

While continuing the enhanced services exemption from interstate access charges, the Commission has been concerned about the impact on the PSTN because "...virtually all residential users today connect to the Internet...through incumbent LEC switching facilities designed for circuit-switched voice calls. The end-to-end dedicated channels created by circuit switches are unnecessary and even inefficient when used to connect an end user to an ISP. We seek comment on how our rules can most effectively create incentives for the deployment of services and facilities to allow more efficient transport of data traffic to and from end users." (para. 313)

There has been concern about the ability to measure Internet communications, end-to-end. In 1996, the Commission sought... "comment on jurisdictional, metering, and billing questions, given the difficulty of applying jurisdictional divisions or time-sensitive rates to packet-switched networks such as the Internet." (para. 315)

**Digital Tornado: The Internet and Telecommunications Policy, FCC Office of Plans and Policy, OPP Working Paper Series 29 (March 1997):**

"[I]t would be difficult to claim that the Internet does not, at some level, involve interstate communications." (page 29) (emphasis added)

**CONCLUSION:** Access to the Internet is predominately interstate traffic over which the Commission has jurisdiction. Any conclusion that Internet service is understood by the FCC to be "local" is contrary to this Commission's view dating back to 1983. In orders dealing with whether ESPs should pay the same kind of access charges that other interstate carriers pay for using the local carrier's network to originate and terminate calls, the FCC has made it clear that communications involving enhanced services is

Attachment  
Page 9 of 9

interstate in nature, not local. The Commission has methodically proceeded to address the application of access charges, i.e. MTS/WATS, ENFLA, Private Network surcharge, telex data, and resellers of WATS/MTS. The Commission has always recognized that ESPs use local exchange facilities for interstate access. During a transition period, ESPs have been exempted from access charges. The Commission intended no discrimination or undue preference in rates for entities using local exchange facilities for access to enhanced services. The ESPs have been exempted from access charges, not because they were local providers outside FCC's jurisdiction, but rather as a matter of policy to protect new businesses from rate shock during a vulnerable start-up time. The FCC has repeatedly held that the jurisdiction of communications are evaluated on an end-to-end basis. The end-users do not make separate communication to the ISP and then to the ultimate Internet site they seek access. The Internet user is merely using the Internet as a means of transmitting data or voice to a distant site, just as the end-user can use a circuit-switched long distance service to reach a final destination. In both cases, the end-user requires the intermediate service provider (ISP or IXC) to complete the connection to the customer's desired destination. In neither case does the end-user's communication terminate at the intermediate service provider.

The FCC order cited by ALTS is not contrary to the FCC decisions that Internet service is not local. The FCC order dealt not with whether ESP traffic should be treated as local or interstate, but rather with the impact on interstate traffic sensitive access charges caused by the ESP access charge exemption. The FCC has been consistent in decisions treating Internet as interstate and in decisions that the jurisdictional nature of a call is based on its ultimate origination and termination, and not its intermediate routing. It is appropriate that Internet usage be assigned to interstate.

B. Jeannie Fry  
Director-  
Federal Regulatory

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May 13, 1998

**Ex Parte**

Ms. Magalie R. Salas  
Secretary  
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RECEIVED

MAY 13 1998

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Re: CC Docket No. 80-286, Jurisdictional Separations Reform and Referral to the Federal-State Joint Board

CC Docket No. 96-45, Federal-State Joint Board on Universal Service

CC Docket No. 96-262, Access Charge Reform

CCB/CPD CC Docket No. 97-30, Request by ALTS for Clarification of the Commission's Rules Regarding Reciprocal Compensation for Information Service Provider Traffic

Dear Ms. Salas:

In accordance with the Commission's rules, please be advised that on Monday, May 11, 1998, Mr. Paul Cooper, Mr. Stan Brower, Mr. Jay Bennett and the undersigned, representing SBC Communications Inc., met with the following:

- Mr. Jim Schlichting, Deputy Bureau Chief of the Common Carrier Bureau;
- Mr. Elliot Maxwell, Deputy Chief of the Office of Plans and Policy; and
- Mr. Craig Brown, Deputy Chief, Ms. Sharon Webber, Mr. Steve Burnett and Mr. Andy Firth of the Accounting Policy Division and Mr. Doug Sloten and Ms. Tamara Preiss of the Competitive Pricing Division.



Specifically, this discussion was held to discuss the materials filed with this Commission on Friday, May 8, 1988, in reference to the issues surrounding Internet Service Provider (ISP) usage.

The FCC, since 1983, has asserted jurisdictional rate authority over ISP Internet usage. Consequently, Internet usage and its costs are interstate access utilization of the local exchange network and under the jurisdiction of the FCC. In order to (a) remove the barrier to local competition created by intrastate requirements of certain State Commissions to inappropriately pay reciprocal compensation for this traffic and (b) forestall further industry confusion regarding the jurisdiction of this usage, the FCC should immediately reaffirm that all (voice and data) Internet access use of the local exchange network is interstate and not subject to local reciprocal compensation.

The FCC, as a second step, should begin to evaluate an appropriate access structure for Internet access usage. That new structure should avoid significant rate shock for ISPs and their customers but it should also provide reasonably non-discriminatory treatment of ISPs and other carriers that use the local exchange network to provide them services.

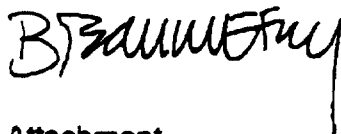
If the FCC determines that it is necessary, certain technical issues involving measurement procedures for Internet usage and mixed use procedures could be referred to the Joint Board in CC Docket No. 80-286 for review.

This letter is being filed one day late due to a power outage in our office. We apologize for any inconvenience that this late filing may have caused.

An original and one copy of this letter and the attachments are being submitted. Acknowledgement and date of receipt of this transmittal are requested. A duplicate transmittal letter is attached for this purpose.

Please include this letter in the record of these proceedings in accordance with Section 1.1206(a)(2) of the Commission's Rules.

Sincerely,



Attachment

**IMMEDIATE FCC ACTION IS NEEDED TO PREVENT FURTHER SUBSTANTIAL HARM TO THE PUBLIC INTEREST CAUSED BY THE ISP ACCESS EXEMPTION AND INAPPROPRIATE APPLICATION OF RECIPROCAL COMPENSATION TO INTERNET USAGE.**

1. **ISP Internet usage is interstate and under the jurisdiction of the FCC.**
  - Since 1983 the FCC has asserted rate jurisdiction over this traffic.
  - The usage can be identified on a mixed-use and end-to-end basis as interstate.
2. **The public interest is substantially harmed by continuing the access charge exemption for ISPs and allowing inappropriate application of reciprocal compensation. This situation causes:**
  - A barrier to local exchange competition.
  - Uneconomic competition for ISP business.
  - Undue preferences and discrimination among service providers (IXCs and ISPs) who use local network access in the same manner.
  - Universal service concerns due to the severe financial and service consequences for LECs.
  - Disruption of the interconnection process.
  - Jurisdictional uncertainty and disputes.
3. **The FCC objectives are being undermined.**
  - ISPs have unreasonable and undue preferences.
  - Inefficient use of the network is encouraged.
  - Uneconomic bypass is encouraged.
  - Preservation of universal service is jeopardized.
  - Barriers to local competition are erected and discriminatory toll competition is encouraged.
4. **Immediate FCC action is needed to:**
  - a) Make it clear that ISP Internet usage continues to be classified as interstate access use of the local network and that it is not subject to reciprocal compensation.
  - b) Establish an interstate compensation mechanism for this usage that is non-discriminatory.

# Reciprocal Compensation and Internet Traffic

A Southwestern Bell Telephone (SWBT) local exchange customer with individual line business service in Dallas, Texas pays a basic service rate of \$25.25 per month. If that customer dials an Information Service Provider (ISP) connected behind a Competitive Local Exchange Company (CLEC) and maintains the connection for the entire month, SWBT would inappropriately be required to pay the CLEC \$388.80 (24 hours x 60 minutes per hour x 30 days x \$0.009 terminating compensation) reciprocal compensation. Consequently, SWBT would lose \$363.55 in the provision of service to that customer. Even if the customer only uses ISP access for slightly less than 2 hours per day, SWBT's \$25.25 monthly rate is wiped out and SWBT would receive no revenue for its cost of providing local service.

## *Dallas Local Exchange Calling Area*

